



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,826	11/22/2002	Santosh Prasad Gaur	RPS920020019	9652

47052 7590 05/20/2005

SAWYER LAW GROUP LLP
PO BOX 51418
PALO ALTO, CA 94303

EXAMINER

CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
----------	--------------

2162

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,826

Applicant(s)

GAUR ET AL.

Examiner

Jean M Corrielus

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the request for consideration filed on December 27, 2004, in which claims 1-27 are presented for further examination.

Response to Arguments

2. Applicant's arguments filed December 27, 2004 have been fully considered but they are not persuasive. (See examiner's remark).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Bass et al (hereinafter "Bass") US Patent no. 6,675,163.

As to claim 1, Bass is directed to the system for finding full match between a search pattern and a pattern stored in a leaf of the search tree. In particular, Bass discloses the claimed "providing a control structure for leaf data comparison as a control vector and a match key" by comparing the input key with the pattern stored in the leaf (col.9, lines 28-40); and "utilizing the control vector to direct types of comparison tests performed with the math key" by determining whether

Art Unit: 2162

caching is enabled the size of the key and the leaf and the type of search to perform (col.10, lines 5-15).

As to claim 2, Bass discloses the claimed “the control setting for a chosen portion of the match key”(col.10, lines 25-61).

As to claim 3, Bass discloses the claimed “a two-bit value” (fig.3; col.10, lines 23-63).

As to claim 4, Bass discloses the claimed “providing the control structure in a fixed block of memory” (col.11, line 20-col.12, line 40; col.15, lines 10-33).

As to claim 5, Bass discloses the claimed “allowing storage of additional data in the fixed size block of memory following the control structure” (col.11, line 20-col.12, line 40; col.15, lines 10-33).

As to claim 6, Bass discloses claimed “control setting to indicate a masked compare test is needed” (col.12, line 45-col.13, line 60).

As to claim 7, Bass discloses the claimed “a mask pattern and key value for the masked compare test” (fig.10; col.14, lines 7-55).

Art Unit: 2162

As to claim 8, Bass discloses the claimed “control setting to indicate a range compare test is needed” (fig.10; col.14, lines 7-55).

As to claim 9, Bass discloses the claimed “maximum and minimum value of a range compare test” (fig.10; col.14, lines 7-55).

As to claims 10-18, the limitations of claim 10-18 have been noted in the rejection of claims 1-9 above. In addition, Bass discloses “an embedded processor (col.5, lines 30-57), and tree search engine” (fig.14; col.9, lines 12-40); and “external memory (col.5, lines 50-57) coupled to the embedded processor, wherein the tree search engine performs on leaf data in the external memory according to a control structure comprising a control vector an match key in the leaf data” (col.9, lines 28-40; col.10, lines 5-15).

As to claims 19-25, the limitations of claims 10-25 have been noted in the rejection of claims 1-9 above. In addition, Bass discloses the claimed “storing leaf data within fixed size blocks of memory in the external DRAM as a control vector and match key”(fig.14; col.10, lines 5-15); “utilizing the control vector and match key to direct comparison done on the leaf data by a search engine of the embedded processing system” (fig.14; col.9, lines 12-40; col.10, lines 5-15).

As to claims 26-27:

Claims 26 and 27 are computer readable containing program instructions for performing the method of claim1 and 19. They are, therefore, rejected under the same rationale.

Remark

(A). Applicants asserted that Bass does not teach or suggest that the leaf data is organized within fixed size blocks of memory in the external DRAM as a control vector and match key and the utilization of the control vector to direct types of comparison tests performed with the match key and also fails to anticipate or remotely suggest the invention, as recited in independent claims 1, 10, 26 and 27. In response, the examiner disagrees with the precedent assertion. However, when read and analyzed in the light of the specification, the invention as claimed does not support applicants' assertion. Moreover, the claims do not capture the essence of the invention as argued in applicants' remark page 9. It is important to note that applicants are interpreting the claims very narrow without considering the broad teachings of the reference used in the rejection. In the last office action, the examiner went through the claims phrase by phrase and referred to the prior art column and line number as to where he has drawn the correspondences between applicants' claims phrases and prior art. By failing to address these correspondences, applicants have failed to rebut the examiner's prima facie case of anticipation uses for a different purpose which does not alter the conclusion that its use in a prior art device would be prima facie anticipate from the purpose disclosed in the reference. Furthermore, the '163 patent is directed to the system for finding full match between a search pattern and a pattern stored in a leaf of the search tree. In particular, '163 patent discloses the claimed "providing a control structure for leaf data comparison as a control vector and a match key" by comparing the input key with the pattern stored in the leaf (col.9, lines 28-40); and "utilizing the control vector

Art Unit: 2162

to direct types of comparison tests performed with the math key” by determining whether caching is enabled the size of the key and the leaf and the type of search to perform (col.10, lines 5-15). Moreover, Applicants are reminded that the examiner is entitled to the broadest reasonable interpretation of the claims. The Applicants always have the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater 162 USPQ 541, 550-51 (CCPA 1969). Hence the 35 U.S.C 102 is hereby sustained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

Art Unit: 2162

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M Corrielus
Primary Examiner
Art Unit 2162

May 11, 2005